

**PATENT** 

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Wang Ling

Serial No.:

09/841,665

Filed:

April 24, 2001

For:

WIRELESS ADDRESSABLE LIGHTING METHOD

AND APPARATUS

Group No.:

2635

Examiner:

Vernal U. Brown

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### APPEAL BRIEF

The Appellant has appealed to the Board of Patent Appeals and Interferences from the decision of the Examiner dated October 18, 2004, finally rejecting Claims 1, 2, and 4-21. The Appellant filed a Notice of Appeal on February 15, 2005. The Appellant respectfully submits this brief on appeal with the statutory fee of \$500.00.

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#### **REAL PARTY IN INTEREST**

This application is currently owned by Koninklijke Philips Electronics, N.V. as indicated by an assignment recorded on April 24, 2001 in the Assignment Records of the U.S. Patent and Trademark Office at Reel 011804, Frame 0840.

# RELATED APPEALS AND INTERFERENCES

There are no known appeals or interferences that will directly affect, be directly affected by, or have a bearing on the Board's decision in this pending appeal.

### STATUS OF CLAIMS

Claims 1, 2, and 4-21 have been rejected pursuant to a final Office Action dated October 18, 2004. Claims 1, 2, and 4-21 are presented for appeal. A copy of Claims 1, 2, and 4-21 is provided in the Appendix.

### **STATUS OF AMENDMENTS**

No amendments were submitted and refused entry after issuance of the final Office Action dated October 18, 2004.

#### **SUMMARY OF CLAIMED SUBJECT MATTER**

Regarding Claim 1, a method of controlling plural lighting devices 160-174 with a single remote control 199 includes associating, one by one, each of the devices 160-174 with the remote control 199. (Application, Figure 1B; Page 5, Lines 9-15). The method also includes associating, one by one, each of the devices 160-174 with at least one of a particular function and a particular key on the remote control 199. (Application, Page 7, Line 5 – Page 8, Line 4). In addition, the method includes accepting a user confirmation acknowledging the association of each of the devices 160-174 in response to a visual confirmation performed by each of the devices 160-174 upon selection of each of the devices 160-174 on the remote control 199. (Application, Page 5, Lines 15-19; Page 7, Lines 9-11).

Regarding Claim 5, an apparatus 199 for controlling plural lighting devices 160-174 over a wireless connection includes a processor for providing commands to the devices 160-174 over the wireless connection in a normal mode. (*Application, Page 4, Lines 6-20*). The apparatus 199 also includes a means for switching between an enumeration mode and the normal mode. (*Application, Page 5, Lines 9-11*). The enumeration mode is utilized to associate the devices 160-174 with the apparatus 199 in response to a visual confirmation performed by each of the devices 160-174 upon selection of each of the devices 160-174 by the processor. (*Application, Page 5, Lines 11-19*).

Regarding Claim 8, a method of utilizing a wireless lighting control protocol includes providing a standardized command set 104 for facilitating command and control between a master device 199 and plural slave lighting devices 160-174. (*Application, Page 4, Line 15 – Page 5, Line 4*). The method also includes interposing a layer of software "Initialization & Binding" between the

command set 104 and a software application. (Application, Figure 1; Page 4, Lines 2-5; Page 4, Line 18 – Page 5, Line 4). The layer of software "Initialization & Binding" includes means for initialization and binding of the devices 160-174 and the master device 199 in response to a visual confirmation performed by each of the devices 160-174 upon selection of each of the devices 160-174 on the master device 199. (Application, Page 5, Lines 11-19; Page 7, Lines 9-11).

Regarding Claim 10, a method of associating each of plural slave devices 160-174 with a master remote control 199 includes communicating a visual signal at each of the devices 160-174 indicating the presence of each of the devices 160-174 upon selection of each of the devices 160-174 on the master remote control 199. (*Application, Page 5, Lines 15-19; Page 7, Lines 6-11*). The method also includes accepting a user confirmation acknowledging that the device 160-174 is to be associated with at least one of the master remote control 199, a particular function of the master remote control 199, and a particular key sequence of the master remote control 199. (*Application, Page 5, Lines 15-19; Page 7, Line 11 – Page 8, Line 20*).

Regarding Claim 21, a method of associating a plurality of slave devices 160-174 with a master remote control 199 includes communicating a visual signal at each of the devices 160-174 indicating the initialization of each of the devices 160-174 upon selection of each of the devices 160-174 on the master remote control 199. (*Application, Page 5, Lines 15-19; Page 7, Lines 6-11*). The method also includes communicating a user indication at the master remote control 199 that each slave device 160-174 is to be associated with at least one of the master remote control 199, a particular function of the master remote control 199, and a particular key sequence of the master remote control 199. (*Application, Page 5, Lines 15-19; Page 7, Line 11 – Page 8, Line 20*).

#### **GROUNDS OF REJECTION**

- 1. Claims 1, 2, 4-7, 10, and 19-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,962,992 to Huang et al. ("Huang") in view of U.S. Patent No. 6,188,181 to Sinha et al. ("Sinha").
- 2. Claims 8, 9, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang* and *Sinha* in further view of U.S. Patent No. 5,847,955 to Mitchell et al. ("Mitchell").
- 3. Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang*, Sinha, and Mitchell in further view of U.S. Patent No. 6,333,605 to Grouev et al. ("Grouev").
- 4. Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang* and *Sinha* in further view of "admitted prior art" ("APA").
- 5. Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang*, Sinha, and APA in further view of U.S. Patent No. 5,986,574 to Colton ("Colton").
- 6. Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang*, Sinha, APA, and Colton in further view of U.S. Patent No. 6,675,196 to Kronz ("Kronz").
- 7. Claims 15 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang* and *Sinha* in further view of U.S. Patent No. 5,295,154 to Meier et al. ("*Meier*").
- 8. Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang*, Sinha, Mitchell, and Meier.

### **ARGUMENT**

#### I. GROUND OF REJECTION #1

The rejection of Claims 1, 2, 4-7, 10, and 19-21 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

#### A. <u>OVERVIEW</u>

Claims 1, 2, 4-7, 10, and 19-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,962,992 to Huang et al. ("Huang") in view of U.S. Patent No. 6,188,181 to Sinha et al. ("Sinha").

Of these, Claims 1, 5, 10, and 21 are independent claims.

#### B. <u>STANDARD</u>

In ex parte examination of patent applications, the Patent Office bears the burden of establishing a prima facie case of obviousness. (MPEP § 2142; In re Fritch, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)). The initial burden of establishing a prima facie basis to deny patentability to a claimed invention is always upon the Patent Office. (MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)). Only when a prima facie case of obviousness is established does the burden shift to the Appellant to produce evidence of nonobviousness. (MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)). If the Patent Office does

not produce a prima facie case of unpatentability, then without more the Appellant is entitled to grant of a patent. (In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Grabiak, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)).

A prima facie case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (In re Bell, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)). To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on the Appellant's disclosure. (MPEP § 2142).

#### C. THE HUANG REFERENCE

Huang recites a lighting control system that controls the operation of lamps and other electrical appliances. (Abstract). The system includes a master controller 100, zone controllers 110, and slave units 120. (Abstract). The master controller 100 controls the slave units 120 in different zones, each zone controller 110 controls the slave units 120 in a zone, and the slave units 120 control the electrical appliances. (Col. 6, Lines 19-23). An infrared controller 160 may be used to control the zone controllers 110 and slave units 120. (Abstract).

In the slave unit 120, an LED display 1416 provides visual information to a user about the operating status of the slave unit. (*Col. 22, Lines 30-32*). An install LED 1526 is used to indicate that the slave unit is being installed and that no commands should be provided to the slave unit. (*Col. 22, Line 59 – Col. 23, Line 2*). When installation of the slave unit begins, the install LED 1526 is turned on. (*Col. 29, Lines 35-47*). When an installation code is received during installation, the install LED 1526 flashes. (*Col. 30, Lines 4-6*). When installation is complete, the install LED 1526 is turned off. (*Col. 30, Lines 7-10*). Various LEDs are also used in the master controller 100 and the zone controller 110 to indicate the current state of the installation of a slave unit 120. (*Col. 27, Line 44 – Col. 28, Line 30*).

## D. THE SINHA REFERENCE

Sinha recites a signal generator capable of providing control schemes used to adjust the luminous output of various light sources. (Abstract). Lighting control units U1-U3 operate through low voltage modules LVM1-LVMn to control lighting loads L1-LN. (Col. 6, Lines 3-11). The lighting loads L1-LN are associated with zones Z1-ZN, and the light intensities of the zones Z1-ZN are controlled by the low voltage modules LVM1-LVMn. (Col. 6, Lines 21-27). Each low voltage module LVM includes LEDs 192-193 that act as status indicators. (Col. 10, Lines 4-5). The LEDs 192-193 are used to provide feedback in response to a diagnostic routine. (Col. 12, Lines 42-46). For example, the LEDs 192-193 operate in "heart beat" mode (repeatedly on for 1/4 second and off for 3/4 second) when no errors are detected, "lighthouse" mode (repeatedly on for 3 seconds and off for 5 seconds) when communication or address errors are detected, or "heart attack" mode (repeatedly

on for 1/8 second and off for 1/8 second) when load errors are detected. (Col. 15, Lines 11-30).

#### E. CLAIMS 1, 2, 4-7, 10, AND 19-21

Claim 1 recites a method of controlling plural lighting devices with a single remote control, which includes the steps of:

associating, one by one, each of the plural lighting devices with the remote control;

associating, one by one, each of the plural lighting devices associated with the remote control with at least one of a particular function and a particular key on the remote control; and

accepting a user confirmation acknowledging the association of each of the plural lighting devices in response to a visual confirmation performed by each of the plural lighting devices upon selection of each of the plural lighting devices on the remote control.

The Examiner fails to establish that the proposed *Huang-Sinha* combination discloses, teaches, or suggests all elements of Claim 1. In particular, the Examiner fails to establish that the proposed *Huang-Sinha* combination discloses, teaches, or suggests accepting a "user confirmation" that acknowledges an "association" of each lighting device "in response to a visual confirmation," where the "visual confirmation" is performed by each lighting device upon "selection" of each lighting device on a "remote control" as recited in Claim 1.

First, *Huang* simply recites that various LEDs are used in a master controller 100, a zone controller 110, and/or a slave unit 120 to indicate the current installation status of the slave unit 120. In particular, the LED 1526 in the slave unit is either turned on during installation, flashing when a code is received, or turned off when installation is complete. The LEDs in the various modules of *Huang* are not used in any way to prompt a user for confirmation of an "association" involving any

slave unit 120. The LEDs in the various modules of *Huang* are also not used in any way to generate a "visual confirmation" at a slave unit 120, where the visual confirmation is performed upon "selection" of the slave unit 120 on a remote control.

Because of this, *Huang* fails to disclose, teach, or suggest accepting a "user confirmation" that acknowledges an "association" involving a lighting device "in response to a visual confirmation" performed by the lighting device as recited in Claim 1. *Huang* also fails to disclose, teach, or suggest that the "visual confirmation" is performed by the lighting device "upon selection of" the lighting device on a "remote control" as recited in Claim 1.

Second, *Sinha* simply recites that multiple LEDs 192-193 are used to identify the status of low voltage modules LVM. In particular, the LEDs 192-193 flash in different patterns depending on whether any errors are detected and the type of errors detected. The LEDs 192-193 in *Sinha* do not prompt a user for confirmation of an "association" involving any of the lighting loads L1-LN. The LEDs 192-193 in *Sinha* also do not generate a "visual confirmation" that is performed upon "selection" of one of the lighting loads L1-LN on a remote control.

As a result, *Sinha* fails to disclose, teach, or suggest accepting a "user confirmation" that acknowledges an "association" involving a lighting device "in response to a visual confirmation" performed by the lighting device as recited in Claim 1. *Sinha* also fails to disclose, teach, or suggest that the "visual confirmation" is performed by the lighting device "upon selection of" the lighting device on a "remote control" as recited in Claim 1.

As shown above, *Huang* simply discloses a system where LEDs are used to indicate the installation status of a device, and *Sinha* simply discloses a system where LEDs are used to identify

any errors in a device. At most, incorporating the functionality of *Sinha* into *Huang* would allow a single device to use LEDs to indicate an installation status and to identify errors in the device. This combination fails to disclose, teach, or suggest accepting a "user confirmation" that acknowledges an "association" of a lighting device "in response to a visual confirmation" performed by the lighting device "upon selection of" the lighting device on a "remote control" as recited in Claim 1.

For these reasons, the proposed *Huang-Sinha* combination fails to disclose, teach, or suggest the Applicant's invention as recited in Claim 1. As a result, the Examiner fails to establish a *prima* facie case of obviousness against Claim 1 (and its dependent claims).

Claim 5 recites a mode used to associate plural lighting devices with an apparatus "in response to a visual confirmation performed by each of the plural lighting devices upon selection of each of the plural lighting devices by [a] processor" in the apparatus. As described above, the proposed *Huang-Sinha* combination fails to disclose, teach, or suggest these elements of Claim 5.

For these reasons, the proposed *Huang-Sinha* combination fails to disclose, teach, or suggest the Applicant's invention as recited in Claim 5. As a result, the Examiner fails to establish a *prima* facie case of obviousness against Claim 5 (and its dependent claims).

Claim 10 recites communicating a "visual signal" at each of plural slave devices "upon selection of each of the slave devices on [a] master remote control" and accepting a "user confirmation" acknowledging that the slave device is to be associated in some way with the master remote control. As described above, the proposed *Huang-Sinha* combination fails to disclose, teach, or suggest these elements of Claim 10.

For these reasons, the proposed *Huang-Sinha* combination fails to disclose, teach, or suggest

the Applicant's invention as recited in Claim 10. As a result, the Examiner fails to establish a prima

facie case of obviousness against Claim 10 (and its dependent claims).

Claim 21 recites communicating a "visual signal" at each of a plurality of slave devices

"upon selection of each of the slave devices on [a] master remote control" and communicating a

"user indication" that each slave device is to be associated in some way with the master remote

control. As described above, the proposed *Huang-Sinha* combination fails to disclose, teach, or

suggest these elements of Claim 21.

For these reasons, the proposed *Huang-Sinha* combination fails to disclose, teach, or suggest

the Applicant's invention as recited in Claim 21. As a result, the Examiner fails to establish a prima

facie case of obviousness against Claim 21 (and its dependent claims).

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claims 1, 2, 4-7,

10, and 19-21 be withdrawn and that Claims 1, 2, 4-7, 10, and 19-21 be passed to allowance.

-12-

#### II. GROUND OF REJECTION #2

The rejection of Claims 8, 9, and 17 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

#### A. OVERVIEW

Claims 8, 9, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang* and *Sinha* in further view of U.S. Patent No. 5,847,955 to Mitchell et al. ("*Mitchell*").

#### B. CLAIMS 8, 9, AND 17

Claim 8 recites method of utilizing a wireless lighting control protocol, which includes:

providing a standardized command set for facilitating command and control between a master device and plural slave lighting devices; and

interposing a layer of software between said command set and a software application, said layer of software including means for initialization and binding of the plural slave lighting devices and the master device in response to a visual confirmation performed by each of the plural slave lighting devices upon selection of each of the plural slave lighting devices on the master device.

As shown above, the Examiner has failed to establish that the proposed *Huang-Sinha* combination discloses, teaches, or suggests initialization and binding of slave lighting devices and a master device "in response to" a "visual confirmation" performed by each lighting device "upon selection of" each lighting device "on the master device" as recited in Claim 8. The Examiner does not rely on *Mitchell* as disclosing, teaching, or suggesting these elements of Claim 8.

For these reasons, the proposed *Huang-Sinha-Mitchell* combination fails to disclose, teach, or

suggest the Applicant's invention as recited in Claim 8. As a result, the Examiner fails to establish a prima facie case of obviousness against Claim 8 (and its dependent claims).

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claims 8, 9, and 17 be withdrawn and that Claims 8, 9, and 17 be passed to allowance.

### III. GROUND OF REJECTION #3

The rejection of Claim 11 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

### A. <u>OVERVIEW</u>

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang*, *Sinha*, and *Mitchell* in further view of U.S. Patent No. 6,333,605 to Grouev et al. ("*Grouev*").

### B. <u>CLAIM 11</u>

Claim 11 depends from Claim 10. As shown above, Claim 10 is patentable. As a result, Claim 11 is patentable due to its dependence from an allowable base claim.

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claim 11 be withdrawn and that Claim 11 be passed to allowance.

# IV. GROUND OF REJECTION #4

The rejection of Claim 12 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

### A. <u>OVERVIEW</u>

Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang* and *Sinha* in further view of "admitted prior art" ("APA").

### B. <u>CLAIM 12</u>

Claim 12 depends from Claim 1. As shown above, Claim 1 is patentable. As a result, Claim 12 is patentable due to its dependence from an allowable base claim.

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claim 12 be withdrawn and that Claim 12 be passed to allowance.

### V. GROUND OF REJECTION #5

The rejection of Claim 13 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

### A. <u>OVERVIEW</u>

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang*, *Sinha*, and *APA* in further view of U.S. Patent No. 5,986,574 to Colton ("*Colton*").

### B. <u>CLAIM 13</u>

Claim 13 depends from Claim 1. As shown above, Claim 1 is patentable. As a result, Claim 13 is patentable due to its dependence from an allowable base claim.

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claim 13 be withdrawn and that Claim 13 be passed to allowance.

# VI. GROUND OF REJECTION #6

The rejection of Claim 14 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

### A. <u>OVERVIEW</u>

Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang*, *Sinha*, *APA*, and *Colton* in further view of U.S. Patent No. 6,675,196 to Kronz ("Kronz").

### B. <u>CLAIM 14</u>

Claim 14 depends from Claim 1. As shown above, Claim 1 is patentable. As a result, Claim 14 is patentable due to its dependence from an allowable base claim.

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claim 14 be withdrawn and that Claim 14 be passed to allowance.

## VII. GROUND OF REJECTION #7

The rejection of Claims 15 and 16 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

### A. <u>OVERVIEW</u>

Claims 15 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang* and *Sinha* in further view of U.S. Patent No. 5,295,154 to Meier et al. ("*Meier*").

### B. <u>CLAIMS 15 AND 16</u>

Claims 15 and 16 depend from Claim 5. As shown above, Claim 5 is patentable. As a result, Claims 15 and 16 are patentable due to their dependence from an allowable base claim.

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claims 15 and 16 be withdrawn and that Claims 15 and 16 be passed to allowance.

# VIII. GROUND OF REJECTION #8

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The rejection of Claim 18 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

### A. OVERVIEW

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huang*, *Sinha*, *Mitchell*, and *Meier*.

# B. <u>CLAIM 18</u>

Claim 18 depends from Claim 8. As shown above, Claim 8 is patentable. As a result, Claim 18 is patentable due to its dependence from an allowable base claim.

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claim 18 be withdrawn and that Claim 18 be passed to allowance.

DOCKET NO. US010217 SERIAL NO. 09/841,665 PATENT

#### **SUMMARY**

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The Appellant has demonstrated that the present invention as claimed is clearly distinguishable over the prior art cited of record. Therefore, the Appellant respectfully requests the Board of Patent Appeals and Interferences to reverse the final rejection of the Examiner and instruct the Examiner to issue a notice of allowance of all claims.

The Appellant has enclosed the appropriate fee to cover the cost of this APPEAL BRIEF. The Appellant does not believe that any additional fees are due. However, the Commissioner is hereby authorized to charge any additional fees (including any extension of time fees) or credit any overpayments to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

Date: April 15, 2005

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#### **APPENDIX**

#### **PENDING CLAIMS**

1. A method of controlling plural lighting devices with a single remote control comprising the steps of:

associating, one by one, each of the plural lighting devices with the remote control;

associating, one by one, each of the plural lighting devices associated with the remote control with at least one of a particular function and a particular key on the remote control; and

accepting a user confirmation acknowledging the association of each of the plural lighting devices in response to a visual confirmation performed by each of the plural lighting devices upon selection of each of the plural lighting devices on the remote control.

- 2. The method of claim 1 wherein the plural lighting devices communicate with the remote control by means of a carrier sense multiple access protocol.
  - 3. (Canceled).
- 4. The method of claim 1 wherein the visual confirmation step includes a predefined sequence of on/off occurrences.
- 5. An apparatus for controlling plural lighting devices over a wireless connection, the apparatus comprising:

a processor for providing commands to said plurality of lighting devices over the wireless connection in a normal mode, and

a means for switching between an enumeration mode and the normal mode, said enumeration mode being utilized to associate said plural devices with said apparatus in response to a visual confirmation performed by each of the plural lighting devices upon selection of each of the plural lighting devices by said processor.

- 6. The apparatus of claim 5 wherein said means for switching only switches upon receipt of a confirmation step from a user.
- 7. The apparatus of claim 5, further comprising software for binding at least one of specific functions and specific key sequences from a remote control with specific ones of said plural lighting devices.

8. A method of utilizing a wireless lighting control protocol comprising the steps of: providing a standardized command set for facilitating command and control between a master device and plural slave lighting devices; and

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interposing a layer of software between said command set and a software application, said layer of software including means for initialization and binding of the plural slave lighting devices and the master device in response to a visual confirmation performed by each of the plural slave lighting devices upon selection of each of the plural slave lighting devices on the master device.

- 9. The method of claim 8 further comprising the step of polling each of the slave devices individually and sequentially to thereby associate each of said slave devices with said master device.
- 10. A method of associating each of plural slave devices with a master remote control comprising the steps of:

communicating a visual signal at each of the slave devices indicating the presence of each of said slave devices upon selection of each of the slave devices on the master remote control, and

accepting a user confirmation acknowledging that said device is to be associated with at least one of said master remote control, a particular function of said master remote control, and a particular key sequence of said master remote control.

- 11. The method of claim 10 wherein said master and each of said slave devices communicate utilizing a Digital Addressable Lighting Interface (DALI) standard protocol and a wireless communications channel.
- 12. The method of claim 1, wherein the lighting devices communicate with the remote control using a Digital Addressable Lighting Interface (DALI) protocol.
  - 13. The method of claim 12, wherein:

the DALI protocol is supported by an application layer; and

the remote control comprises a network layer, a data link layer, and a physical layer that are transparent to the application layer.

- 14. The method of claim 13, wherein the data link layer and the physical layer support Bluetooth communications with the lighting devices.
- 15. The apparatus of claim 5, wherein the processor is capable of identifying at least one of the devices and assigning a short address to the at least one identified device while in the enumeration mode.

DOCKET No. US010217 SERIAL No. 09/841,665 PATENT

The apparatus of claim 15, wherein: 16.

at least one of the devices is capable of providing a visual indication when the short address is assigned to the device; and

the processor is capable of receiving confirmation from a user in response to the visual indication.

- The method of claim 8, wherein the master device comprises a remote control, and 17. further comprising associating at least one of the slave devices with at least one of a particular function and a particular key on the remote control.
- The method of claim 8, wherein initializing and binding one of the slave devices to 18. the master device comprises assigning a short address to the slave device.
- The method of claim 10, wherein the visual signal comprises one of the devices 19. flashing on and off.
- 20. The method of claim 10, wherein the visual signal comprises one of the devices blinking off.
- A method of associating a plurality of slave devices with a master remote control 21. comprising the steps of:

communicating a visual signal at each of the slave devices indicating the initialization of each of said slave devices upon selection of each of the slave devices on the master remote control; and communicating a user indication at the master remote control that each said slave device is to

be associated with at least one of said master remote control, a particular function of said master

remote control, and a particular key sequence of said master remote control.

**ET NO. US010217** NT NO. PHIL06-10217 2435

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Wang Ling

Serial No.:

09/841,665

Filed:

April 24, 2001

For:

WIRELESS ADDRESSABLE LIGHTING METHOD

AND APPARATUS

Group No.:

2635

Examiner:

Vernal U. Brown

#### MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### **CERTIFICATE OF MAILING BY FIRST CLASS MAIL**

Sir:

The undersigned hereby certifies that the following documents:

- 1. Appeal Brief;
- 2. Fee Transmittal for FY 2005 (in duplicate);
- Check in the amount of \$500.00 for the Appeal Brief filing fee; and 3.
- 4. Two (2) postcard receipts

relating to the above application, were deposited as "First Class Mail" with the United States Postal Service, addressed to MAIL STOP APPEAL BRIEF - PATENTS, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 15, 2005.

Date: April 15, 2005

Date: April 15, 2005

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FEE	TR	AN	SMI	TTA	<b>AL</b>
•	for	FY	200	5	

Effective 10/01/2004. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 500.00

Name (Print/Type)

Signature

William A. Munck

Complete if Known					
Application Number	09/841,665				
Filing Date	April 24, 2001				
First Named Inventor	Wang Ling				
Examiner Name	Vernal U. Brown				
Art Unit	2635				
Attorney Docket No.	US010217 (PHIL06-10217)				

METHOD OF PAYMENT (check all that apply)		FEE CALCULATION (continued)					
Check Credit card Money Other None		3. ADDITIONAL FEES					
Deposit Account:		1	Entity				
Deposit	50-0208	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
Account Number	50-0208	1051	130	2051	65	Surcharge - late filing fee or oath	
Deposit Account	Davis Munck, P.C.	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
Name	a cuth a viral to vichock all that analy)	1053	130	1053	130	Non-English specification	
The Director is authorized to: (check all that apply)  Charge fee(s) indicated below  Credit any overpayments		1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
Charge any additional fee(s) or any underpayment of fee(s)		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge fee(s) indicated below, except for the filing fee		1805	1.840*	1805	1.840*	Requesting publication of SIR after	
to the above-id	entified deposit account.		•		.,	Examiner action	
	FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FI	LING FEE	1252	430	2252	215	Extension for reply within second month	
Large Entity S	mall Entity Fee Fee Fee Description Fee Paid	1253	980	2253		Extension for reply within third month	
	Code (\$)	1254		2254	765	Extension for reply within fourth month	
1001 790	2001 395 Utility filing fee	1255	,	2255	.,	Extension for reply within fifth month	
1002 350	2002 175 Design filing fee	1401	340	2401		Notice of Appeal	2522.22
	2003 275 Plant filing fee	1402	340	2402		Filing a brief in support of an appeal	\$500.00
	2004 395 Reissue filing fee	1403	300	2403		Request for oral hearing	
1005 160	2005 80 Provisional filing fee	1451		1451		Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) -0-		1452	110	2452	-	Petition to revive - unavoidable	
2. EXTRA C	LAIM FEES FOR UTILITY AND REISSUE	1453 1501		2453 2501		Petition to revive - unintentional Utility issue fee (or reissue)	
	Fee from  Ext <u>ra Claims below Fee Paid</u>	1501	490	2502		Design issue fee	
Total Claims	-20** = X =	1503	660	2503		Plant issue fee	
Independent Claims	- 3** = X =	1460	130	1460	130	Petitions to the Commissioner	
Multiple Deper	ndent =	1807	50	1807	7 50	Processing fee under 37 CFR 1.17(q)	
Large Entity		1806	180	1806	180	Submission of Information Disclosure Stmt	
Fee Fee Code (\$)	Fee Fee <u>Fee Description</u> Code (\$)	8021	40	8021	1 40	Recording each patent assignment per property (times number of properties)	
1202 18	2202 9 Claims in excess of 20	1809	790	2809	395	Filing a submission after final rejection	
1201 88	2201 44 Independent claims in excess of 3					(37 ČFR 1.129(a))	<b></b>
1203 300	2203 150 Multiple dependent claim, if not paid	1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))	
1204 88	2204 44 ** Reissue independent claims over original patent	1801	790	2801	395	Request for Continued Examination (RCE)	
1205 18	2205 9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900	Request for expedited examination of a design application	
SUBTOTAL (2) (\$) -0-			Other fee (specify) Terminal Disclaimer filing fee				
**or number previously paid, if greater; For Reissues, see above					Filing F	ee Paid SUBTOTAL (3) (\$) 500.0	00
SUBMITTED BY (Complete (if applicable))							

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Registration No.

39,308

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April 15, 2005

Date